Army Standardization Program (ASP)

A Presentation to AMC G-3,
MG Stevenson

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Standardization Defined

As defined in DOD 4120.24-M, "Defense Standardization Program Policy and Procedures," Standardization is:

The process of agreeing on and documenting uniform engineering criteria for products, processes, and methods to achieve materiel compatibility, interoperability, interchangeability, or commonality.

Presentation Purpose

Show the connection between

AMC's mission to support Army warfighters' materiel requirements and readiness

and

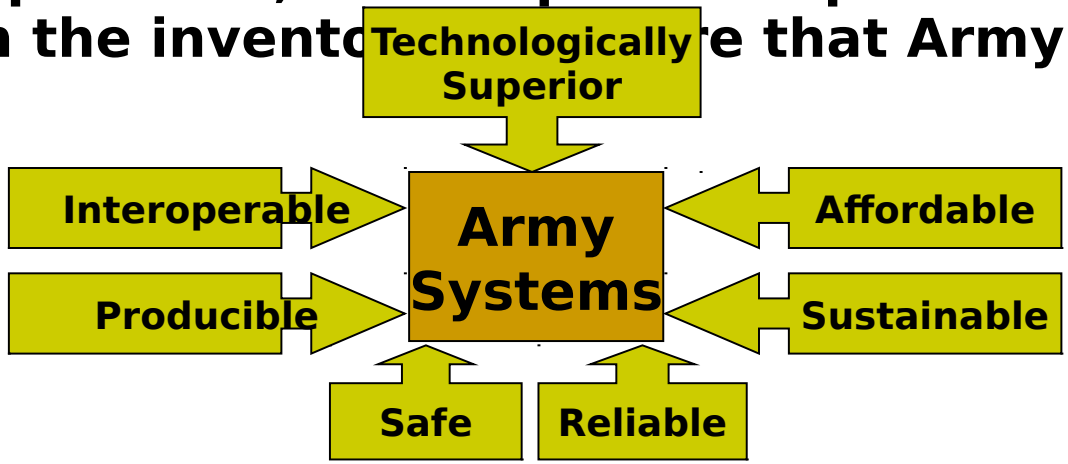
the Army Standardization Program's functions within the materiel acquisition & sustainment infrastructure.

The Mission Connection

If a Soldier shoots it, drives it, flies it, wears it, or eats it, AMC provides it.

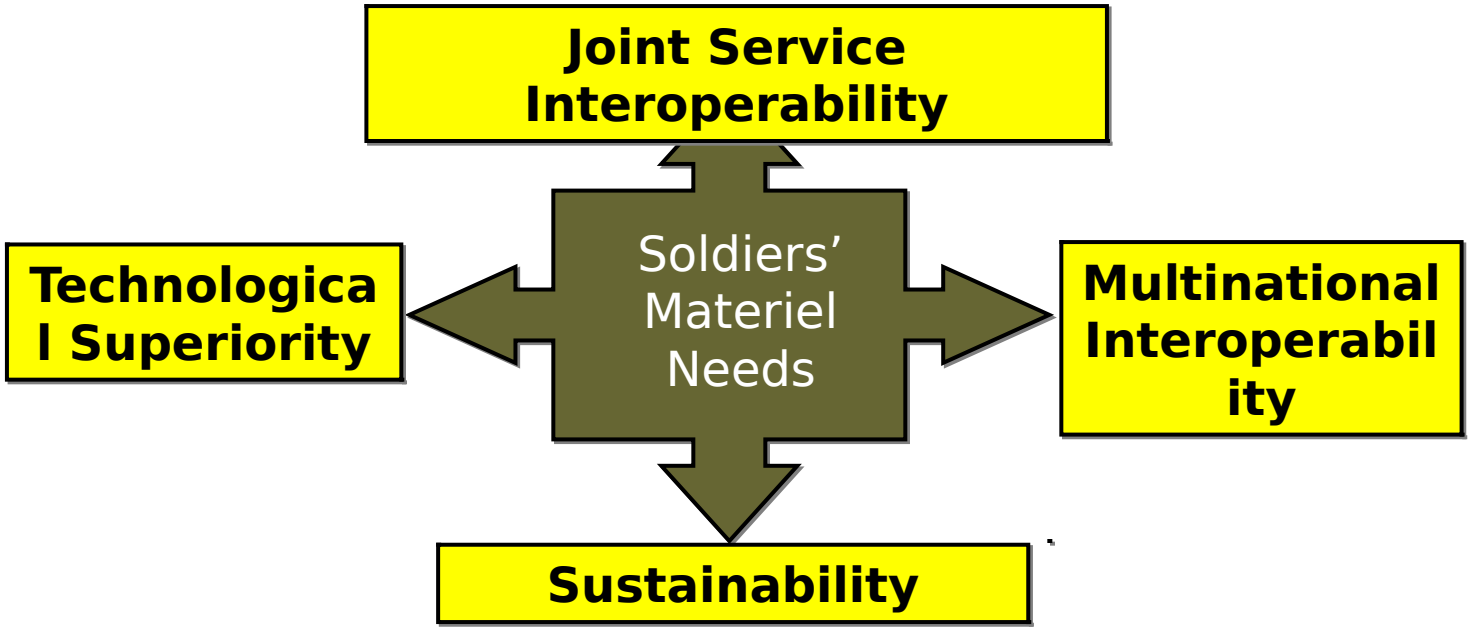
- **AMC's Mission: To develop the future Army while supporting and sustaining the current Army.**

- **ASP's Mission: To document engineering decisions, qualify products, and help control proliferation of parts in the inventory to ensure that Army materiel is . . .**



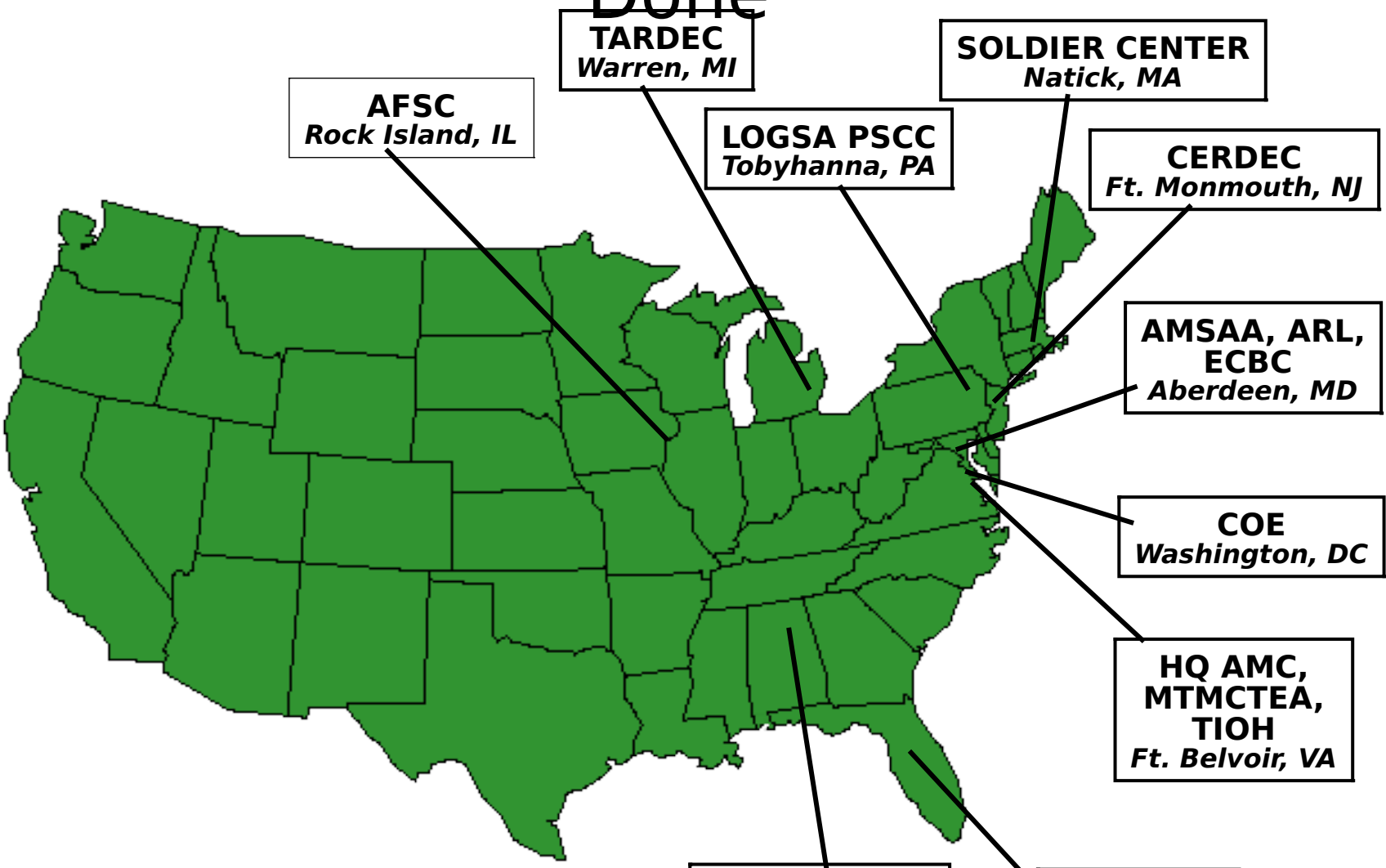
The ASP's Mission must be adequately funded to be effective (see TABS A and B).

AMC & ASP - Supporting Soldiers' Materiel Needs



- **Performance-based requirements in standardization documents enable Army system developers and acquirers to produce technologically superior materiel.**
- **Standardization helps system developers/acquirers to ensure joint and international compatibility and interoperability of equipment.**
- **Standardization of spares and repair/replacement parts facilitates and reduces the cost of logistic support and sustainment.**

Where Is Army's Standardization Work Done



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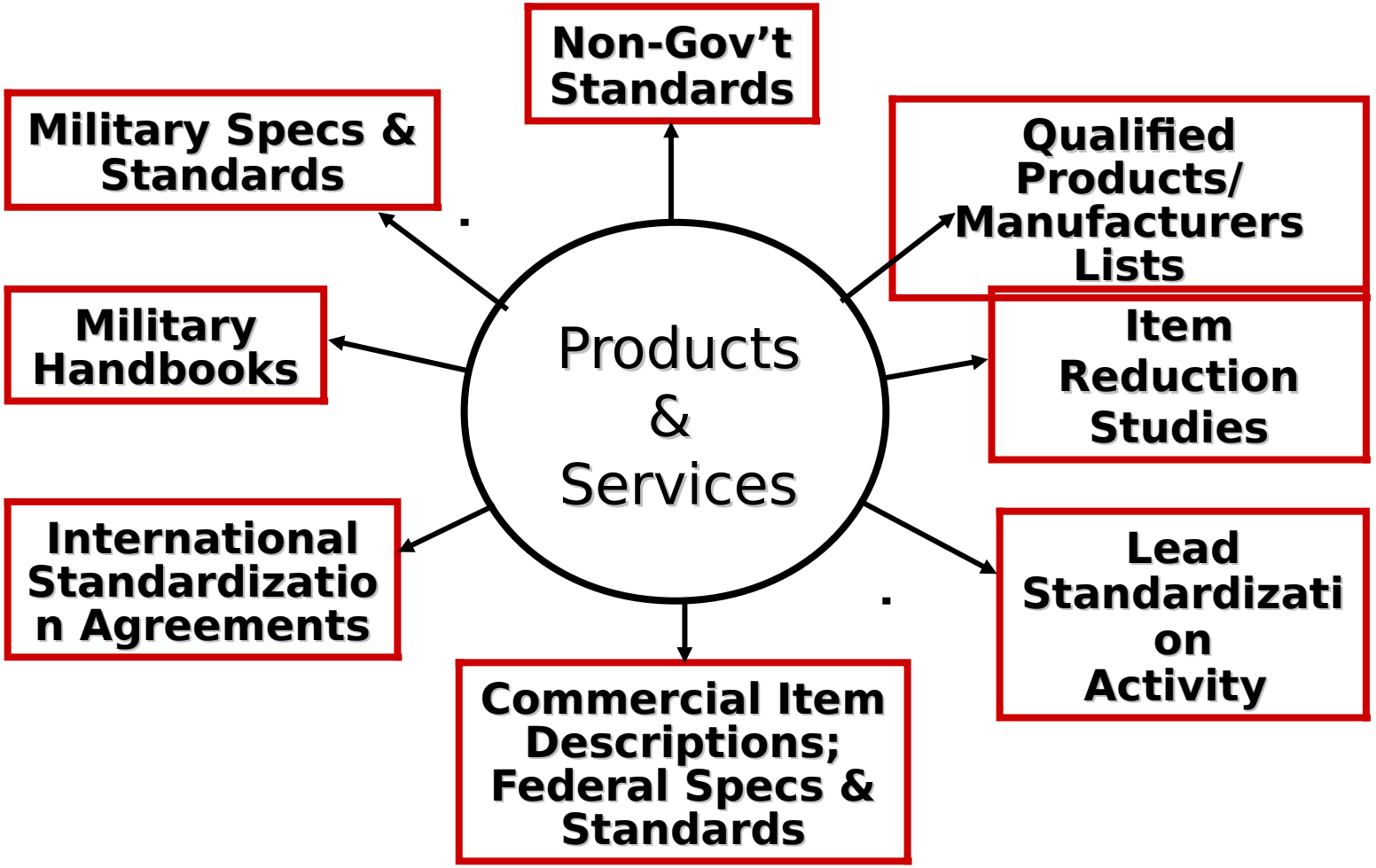
The ASP's Products & Services



The viewgraphs that follow describe these products and services.

Army Standardization Program

What Products & Services Enable the Mission?

- **Army is the Preparing Activity for nearly 9000 standardization documents.**
  - **There are approximately 40,000 acquisition & sustainment related documents listed for all DOD Services and Agencies in the ASSIST* database.**
  - **Army is a user (custodian or reviewer) of many documents controlled by other military Services.**
- **Documents vital to weapon system acquisition & sustainment are:**
  - **Military Specifications & Standards (Mil Specs and Stds)**
  - **Non-Government Standards (NGS)**
  - **Qualified Products Lists (QPL)/Qualified Manufacturers Lists (QML)**
  - **International Standardization Agreements (ISA: STANAG, QSTAG)**
  - **Commercial Item Descriptions (CID) and Federal Specifications & Standards**
  - **Military Handbooks (repository of corporate technical knowledge)**
- **Other Standardization services supporting acquisition & sustainment are:**
  - **Item Reduction (IR) Studies**
  - **Lead Service Activity functions performed by Army Standardization Management Activities for critical commodities.**

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* **Acquisition Streamlining and Standardization Information System maintained by the DOD Document Automation and Production Service (DAPS) (see TAB C)**

How Do Specs/Stds Help Meet Soldier Needs?

- **A military specification defines the essential technical requirements of Army materiel.**
  - **Detail specs are developed when commercial or performance specs are not adequate to define Army's unique requirements.**
  - **Performance specs are written or revised to describe item form, fit, and function which . . .**
    - **Creates opportunities to acquire newer technology & leverage industry innovation**
    - **Expands the number of competing suppliers, resulting in cost savings in both procurement and resupply**
- **A military standard documents the engineering & technical requirements for producing the materiel warfighters will use.**
- **Here are some examples of specs/standards that underwrite AMC's mission:**
  - **17 military specs (see TAB D) are needed to describe the components and ballistic protection required for the body armor systems worn by soldiers in Iraq and Afghanistan.**
  - **The M1A1/2 Abrams Tank requires over 1000 standardization documents to define the requirements for building, maintaining, and repairing the system.**

What Role Do NGS Play?

- **NGS are developed by the technical committees of voluntary standards organizations and, when appropriate, are adopted for military use.**
- **DODI 5000.1, "Defense Acquisition System," names NGS as the preferred standardization documents to use in acquisition.**
- **Why? To access the commercial industrial base and benefit from the availability of:**
  - **State-of-the-art technologies. Using NGS enables the Army to insert newer commercial technology into systems using a spiral development strategy.**
  - **Proven products in the commercial marketplace. Dual-use enables the Army to standardize on off-the-shelf products and take advantage of a combined civilian-military consumer base to reduce cost.**
- **Participation in NGS development is essential to ensure that Army's unique military requirements are considered, and to keep Army engineers and system developers abreast of technology breakthroughs.**

How Do QPL/QML Save ALT/PLT and Cost?

- **QPL/QML are established for frequently procured items requiring time-consuming and costly first article testing.**
- **Army maintains and updates approximately 60 QPL/QML which are listed in the ASSIST.**
- **Using QPL/QML . . .**
  - **Ensures availability of acceptable products**
  - **Reduces procurement lead-times**
  - **Avoids the high cost of repetitive testing**
- **Historical examples:**
  - **Vehicle track durability tests cost upwards of $500K and require 4 to 6 weeks at a Government proving ground. By qualifying the manufacturer's product and processes, a significant ALT/PLT reduction and cost avoidance was achieved on $103M worth of track buys.**
  - **A $400K cost avoidance and 2-to-3 month improvement in delivery schedule was achieved by using a QPL in purchasing a dozen lots of 12-volt vehicle batteries.**
  - **Five vendors have been qualified as suppliers of Chemical Agent Resistant Coating (CARC) purchased to MIL-DTL-64159, thus avoiding one-at-a-time qualification testing for each procurement.**

How Do ISA Help Meet the Interoperability Mandate?

- **Materiel ISA developed by NATO, ABCA, and ASCC* working groups are implemented in standardization documents, ensuring compatibility or interoperability of equipment, ammunition, and supplies.**
- **As Army's executive agent for Standardization, the Army SE is tasked in DOD 4120.24-M, "Defense Standardization Program Policy and Procedures," to perform a policy review of ISA to ensure that they, and their implementing documents, conform to the tenets of Acquisition Reform .**
- **The result of AMC's pre-ratification review is an AMC position on ratification submitted to the originating office, DA DCSOPS or DASA (DE&C).**
- **Examples of ISA of critical importance to the Army are those for JP-8 fuel, vehicle recovery towbars, and refueling nozzles.**

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* **Air Standards Coordinating Committee**

What Do IR Studies Contribute to Sustainment?

- **IR Studies are conducted to identify a "preferred" part applicable to many systems.**
- **Approval of part substitutions proposed in IR Studies enables one-of-a-kind, obsolete, and redundant items to be purged from the supply system, thus reducing the cost of inventory.**
  - **These studies are produced by the Defense Logistic Information Service (DLIS) and are provided to the Services for review and validation of the proposed preferred part.**
  - **The Army Standardization offices coordinate IR Studies with Program Offices having design control authority to obtain the technical review and concurrence or nonconcurrence required.**
- **All users are asked to approve procurement of the proposed "preferred" part (see TAB E).**
- **Bottom line: IR Studies support efforts to ensure that the best available part is sent to maintain soldiers' equipment.**

What Functions Do LSA Perform?

- **LSA are the technical focal points for assigned Federal Supply Classes (FSC) and must approve or disapprove development or revision of standardization documents within their FSC.**
- **LSA oversee and coordinate standardization efforts to ensure the optimal degree of standardization among DOD components.**
- **Army serves as the DOD LSA managing standardization documentation for commodities essential for Army's operational needs. For example:**
  - **TARDEC- trucks, tires, and engines**
  - **ARDEC - ammunition and guns**
  - **AMRDEC - helicopters**
  - **CERDEC - communications equipment and non-automotive batteries**
  - **COE (Corps of Engineers - Survey Equipment**
  - **DTC (Developmental Test Center) - Environmental Test Methods**

When Are Fed Specs/Stds & CID Used?

- **Federal Specifications and Standards are developed or revised to establish requirements for commercial products . . .**
  - **When no NGS or military spec or standard exists that is adequate for the purpose.**
  - **They may specify design, performance, or other essential characteristics required by DOD.**
- **A CID is a short, simple product description . . .**
  - **Written in performance terms.**
  - **Used to procure commercially available items that are usually bought in large quantities.**

Summary of ASP Actions Supporting AMC's Mission to Equip and Sustain Soldiers

Army Standardization Program

***Action*: Access industrial base using performance-based requirements.**
***Benefit*: Commercial technology can be inserted.**

- **Warfighting Capability ▲**
- **Ownership Cost ▼**

***Action*: Update, validate, and maintain specs and standards.**
***Benefit*: Item data is accurate and available for procurement.**

- **Cycle Time ▼**
- **Acquisition Cost ▼**

***Action*: Develop new standardization documents.**
***Benefit:* State-of-the-art technology is captured for new & legacy systems.**

- **Warfighting Capability ▲**
- **Acquisition Cost ▼**

***Action*: Establish & maintain currency of QPLs.**
***Benefit:* Costly first article testing is avoided.**

- **Acquisition Cost ▼**
- **Ownership Cost ▼**

***Action*: Screen for opportunities to increase parts commonality/interchangeability.**
***Benefit:* Reduced number of NSN; increased likelihood of compatibility/interoperability of materiel & equipment.**

- **Warfighting Capability ▲**
- **Inventory/Resupply Cost ▼**

Presentation Purpose Achieved

- **Standardization is part of the technical and sustainment infrastructure that MUST BE IN PLACE to enable programs to develop, acquire, and sustain materiel for the warfighter.**
  - **Standardization's importance in meeting the Army's materiel needs with the best available technical solutions in a cost and time effective manner too often falls below the radar.**
  - **It cannot be neglected and later revived without great cost in dollars and delays.**
- **Standardization's role in achieving compatibility and interoperability with other U.S. forces and coalition partners cannot be filled by any other strategy or program.**
- **The facts presented in this briefing support the assertion that Standardization and the ASP are vital to the success of the Army's development, acquisition, and sustainment efforts.**